

Report on 2010

We want to be the leader in simple, eco-friendly and energy-saving solutions for heating, cooling and hot water to support the sustainable and profitable growth of our family-owned company.

Contents

| | |
|--|---|
| 1 Letter from the Management Board | 18 Energy-efficient products and systems |
| 2 The year 2010 | 20 The products of the Vaillant Group |
| 4 The Vaillant Group presents itself | 22 Naturally economical |
| 6 The Vaillant Group as a family-owned company | 24 Energy-efficient systems |
| 7 Boards | |
| 8 A look at the world of tomorrow | 26 The Vaillant Group in concrete terms |
| 10 Climate | 28 The Vaillant Group brands |
| 12 Resources | 30 Global presence |
| 14 Energy efficiency | 32 Production |
| 16 Demographics | 34 Research and development |
| | 36 Employees |
| | 38 Quality |
| | 40 Sustainability |
| | 42 History of the Vaillant Group |
| | 44 The Vaillant Group in figures |
| | 46 Imprint |



Ralf-Otto Limbach, Dr Carsten Voigtländer, Dr Dietmar Meister

Ladies and gentlemen,

The Vaillant Group looks back positively at the last financial year. Despite a partly continuing difficult overall economic situation, we improved our sales, our result and our market shares. Our business in highly efficient technologies and products based on renewable energies was a growth driver. In particular, against general market trends we significantly increased our sales of condensing technology, heat pumps and solar thermal systems. This confirms for us our alignment on energy-efficient technologies that intelligently link renewable energies with tried and tested technology.

The international heating technology market has been in continual change for years. The demand for highly energy-saving systems technology that uses resources as economically as possible and in combination with renewable energies will grow further in the long term. In response to the new demands, the Vaillant Group already began in 2009 to reposition its eight heating technology brands. We completed this step in 2010. From now on, the Vaillant brand will serve the premium segment more strongly. By contrast, the Saunier Duval Brand Group focuses on the high-volume middle market segments.

The long tradition of the Vaillant Group is characterised by strength of innovation and technology leadership. As a family-owned company we put our faith in a sustainable and long-term strategy. Accordingly, we focus our research and development on technologies of the future such as combined heat and power, heat pumps and hybrid systems. Last year we launched the zeoTHERM, the world's first zeolite gas heat pump, the first to use the environment-friendly mineral zeolite for heating purposes. The zeoTHERM is thus the most efficient gas-fired heating system in the world. In addition, together with our cooperation partner Honda we brought Europe's first micro-combined heat and power system for single- and two-family houses to market maturity. The Vaillant ecoPOWER 1.0 will go on sale from mid-2011.

This report gives you an insight into the main developments and events at the Vaillant Group in 2010.

Dr Carsten Voigtländer

Chief Executive Officer

Ralf-Otto Limbach

Managing Director
Sales & Marketing

Dr Dietmar Meister

Managing Director
Finance & Services

The year 2010

January 2010 ► 01

Opening of solar collectors production in Turkey

Solar thermal flat-plate collectors have been produced at the Turkish site of the Vaillant Group in Bozüyük since January 2010. The Group now manufactures solar collectors at three sites.



02

01



February 2010 ► 02

Introduction of Saunier Duval in Austria

The Vaillant Group brand Saunier Duval is now also represented on the Austrian market. This means the Group is present in Austria with two brands. With easy-to-install, tried and trusted products, Saunier Duval now also offers Austrian customers clever solutions with excellent value for money.



03

March 2010 ► 03

Presentation of the new Genia Hybrid heat pump

At the major winter trade fairs in Europe, the Vaillant Group Saunier Duval brand family presented its new Genia Hybrid heat pump. This reduces heating costs and emissions by the combined operation of an air-water heat pump and a gas-fired condensing boiler.



04

April 2010 ► 04

Market launch of the world's first zeolite gas heat pump

In April, Vaillant brings the world's first zeolite gas heat pump to market. The new technology combines the advantages of modern heat pumps with those of gas-fired condensing boilers and solar technology. To increase its efficiency even further, the pump is equipped with a zeolite unit.



05

May 2010 ► 05

Vaillant at the Expo in Shanghai

The Vaillant Group brand Vaillant presents itself at the German Pavilion at the Expo 2010 in Shanghai. Under the Expo motto "Better City, Better Life", Vaillant shows how energy-efficient heat pumps can be installed even in heavily populated areas.

June 2010 ► 06

Vaillant supports Good Luck tour

With the support of Vaillant, more than 30 chimney sweeps (known in Germany as bringers of good luck) cycled right across the country for a good cause. On their annual tours they collect donations for children suffering from cancer. Supported by a great number of private sponsors and companies, almost €400,000 have been collected since the tours started.



06



12



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10



09



08



07

July 2010 ► 07

Vaillant Group employee magazine wins inkom. Grand Prix

The Vaillant Group employee magazine LIFE is awarded the inkom. Grand Prix of the German Public Relations Association (DPRG). The best employee magazines are honoured by an expert jury as part of a competition for employee media. In 2010, LIFE scores a respectable third place among a big field of contestants.

August 2010 ► 08

Saunier Duval wins Internet prize

Clearly structured with intuitive navigation, helpful functions and an appealing design – that's how the Website of the Vaillant Group brand Saunier Duval presents itself. And wins applause. The jury of the online magazine of a French building industry insurer awarded the Internet site saunierduval.fr with the "Trophées Batiactu". The Saunier Duval Website won against about 200 competitors.

September 2010 ► 09

Belper plant: "Masters of Manufacturing"

The Vaillant Group plant in Belper, England, wins the prestigious Best Factory Awards (BFA) in the UK in two categories: Best Engineering Factory and Energy & Sustainability. The BFA offers industrial companies the opportunity to measure themselves at a high level against other manufacturers.

October 2010 ► 10

ecoPOWER and Schrick cooperate

The gas-powered combustion engine of the Vaillant ecoPOWER micro-combined heat and power system is now produced by the Remscheid engine manufacturer AVL Schrick. With this company, the Vaillant Group has gained a strong partner with further expertise in engine development.

November 2010 ► 11

Vaillant Group nominated for the German Sustainability Award

As in 2009, the Vaillant Group also reached the winners' rostrum in the 2010 German Sustainability Award contest. The company is one of the top three in the category "Germany's most sustainable products and services".

December 2010 ► 12

One million ecoTECs produced in Belper

On 16 December, the Vaillant Group plant in Belper, England, celebrates the manufacture of its one millionth Vaillant ecoTEC condensing boiler for the British market. The anniversary appliance is an ecoTEC plus 831.



More than 136 years of efficiency

As an innovation driver and a family company rich in tradition, for more than a century the Vaillant Group has helped shape the international heating technology market for more than a century.

Since its founding more than 136 years ago the Vaillant Group has been one of the market leaders and technological pace-setters of the heating, ventilation and air-conditioning industry. In line with our corporate vision, we offer our customers around the world simple, eco-friendly and energy-saving solutions for heating, cooling and hot water. Technologies based on renewable energies, such as solar thermal and photovoltaic installations, heat pumps and wood pellet boilers are thereby becoming increasingly important. There is also growing demand for environment-friendly hybrid systems that intelligently combine various components with each other, such as solar collectors, hot water storage cylinders and controls. Our product portfolio also encompasses highly-efficient combined heat and power technology, ventilation units for low-energy houses, efficient wall-hung and floor-standing boilers based on gas or oil, gas and electric water heaters, air-conditioning systems and radiators.

With about 12,400 employees, we manufacture our products at 14 sites in eight countries and sell them in more than 80. In 2010 the Vaillant Group achieved sales totalling €2,314 million. We are thus the second largest company in the industry throughout Europe. In the wall-hung boiler sector, we have a leading position worldwide. The Vaillant Group has also expanded its sales of products based on renewable energies in the last five years.

An important mainstay of the Vaillant Group is our service business which also recorded a positive development in financial year 2010. Our customers and installation partners benefit from our pre-sales service such as planning support or training courses, but also from our after-sales service. The factory after-sales service supports our sales partners on technical questions and ensures the functionality of the product systems among end-customers.



The headquarters of the Vaillant Group is in Remscheid, Germany.





The Vaillant Group as a family-owned company

The owners of the Vaillant Group exercise their entrepreneurial responsibility in the Partners' Board, the Supervisory Board and the Partners' General Meeting. The corporate strategy is laid down by the Management Board in close consultation with the Partners' Board. The focus thereby is not on short-term success but on the long-term increase of the company's value.

Family-owned companies are seen as job motors and drivers of economic growth. The Vaillant Group has been in family ownership since its founding more than 136 years ago. A corporate policy focused on long-term development is characteristic of many successful family companies – as it is of the Vaillant Group. According to the latest survey findings of the German Family Company Foundation, the above-average equity ratio of such companies gives them stability even in economically difficult times. Its good and longtime relationships with its customers and suppliers, a high equity cover, committed employees and alignment on the long term also carried the Vaillant Group successfully through last year.

The owner family engages itself in the bodies of the Vaillant Group and so helps to shape the successful and sustainable advancement of the company:

The **Partners' General Meeting** is the representation of all the owners. Its tasks include among others the appointment of the Supervisory Board and the members of the Partners' Board.



The **Partners' Board** is the representation of the owners that is elected by the Partners' General Meeting. It consists of three family members and two external members. The appointment of the Management Board and the adoption of that board's agenda including the allocation of responsibilities requires the approval of the Partners' Board.

The **Supervisory Board** consists of six representatives of the owners and six representatives of the employees of the Vaillant Group. Its composition and rights are derived from the Companies Act, the Co-Determination Act, the agenda of the Supervisory Board and the articles of Vaillant GmbH. The Supervisory Board appoints the Management Board following prior approval from the Partners' Board.

Johann Vaillant was the founder of the Vaillant Group. From the very beginning he placed great importance on social involvement and sustainable development.

Boards

Partners' Board

Dr Matthias Blaum

Lawyer
Meerbusch
Born 1955
Appointed 2007

Werner Globke

Lieutenant Colonel (ret)
Bonn
Born 1942
Appointed 1998

Dr Christoph M. Müller

Lawyer
Küssnacht am Rigi/
Switzerland
Born 1948
Appointed 1986

Hartmut Reuter

Business consultant
Birchwil/Switzerland
Born 1957
Appointed 2010

Dr Philipp Vaillant

Graduate engineer
Hanover
Born 1968
Appointed 2002

Supervisory Board

Dr Matthias Blaum

Lawyer
Meerbusch
Born 1955
Appointed 2007
Chairman since 25.6.2007

Gottfried Meyer

Member of the Vaillant GmbH
works council Remscheid
Born 1949
Appointed 2001
Vice-Chairman since 7.12.2006

Werner Globke

Lieutenant Colonel (ret)
Bonn
Born 1942
Appointed 2001

Fritz-Josef Kurth

Group Manufacturing Manager
Senior management
representative
Vaillant GmbH
Remscheid
Born 1951
Appointed 2006

Norbert Lux

1st special representative of
IG Metall Remscheid-Solingen
Remscheid
Born 1962
Appointed 2010

Dr Christoph M. Müller

Lawyer
Küssnacht am Rigi/
Switzerland
Born 1948
Appointed 2001

Hartmut Reuter

Business consultant
Birchwil/Switzerland
Born 1957
Appointed 2010

Yasemin Rosenau

Chair of the works council
Gelsenkirchen plant
Gelsenkirchen
Born 1968
Appointed 2006

Bernhard Schmelzing

Member of the works council
of Vaillant Roding
Roding
Born 1949
Appointed 2001

Dr Philipp Vaillant

Graduate engineer
Hanover
Born 1968
Appointed 2001

Sibylle Wankel

Trade union secretary
of IG Metall
District Management Bavaria
Munich
Born 1964
Appointed 2001

Paul Witschi

Business consultant
Rüschlikon/Switzerland
Born 1943
Appointed 2007

Management Board

Dr Carsten Voigtländer

Chief Executive Officer
Wermelskirchen
Born 1963 in Neumünster
Vaillant Group Managing
Director since 1.9.2009
CEO since 1.1.2011

Ralf-Otto Limbach

Düsseldorf
Born 1962 in Aachen
Vaillant Group Managing
Director since 1.11.2007

Dr Dietmar Meister

Hilden
Born 1962 in Stuttgart
Vaillant Group Managing
Director since 1.7.2009

A LOOK AT THE WORLD OF TOMORROW

A look into the future, to gaze into the crystal ball someday. That idea has fascinated people since antiquity. Back then, they asked the Sphinx. Today, they use scientific tools to predict the world of tomorrow. Yet one thing is for sure: Even now we're not able to forecast the future with any certainty. However, there are valid methods of projecting credible visions of the future – so-called scenarios. They don't reflect the absolute truth, but they provide a picture of the various possible realities of tomorrow. Scenarios are a relevant scientific dimension for companies in particular. The Vaillant Group uses such scenarios as an important basis for a sustainable and forward-looking corporate strategy.

What will the Vaillant Group world look like in 2020? The Group Scenario Report on the heating, ventilation and air-conditioning industry in 2020 aims to answer that question. It shows what impacts the expected future climatic, economic, social and cultural changes can have on the markets and the company's business model.

An interdisciplinary team has identified the most important and at the same time most difficult to estimate factors of influence on the business of the Vaillant Group in its core markets. The assessment of in-house and external experts, statisticians and studies provide assumptions on the future development. The result is a basic scenario that serves as the foundation for the Vaillant Group strategy. On the following pages we present the most important external developments for which the Vaillant Group must prepare itself, its products and its services. ►



Markus Wieber has used scientific methods to venture a look into the crystal ball for the Vaillant Group. The result is the Group Scenario Report 2020.





The challenges of tomorrow –
the Vaillant Group world in 2020

Climate

The climate change will increase by 2020. Climate protection will become one of the central global challenges. Also north of the Alps, there will be more summer days with temperatures above 35 degrees Celsius. This means the need for indoor cooling will rise. As a result, the demand for air-conditioning technology will grow. By contrast, the demand for heating technology will remain unchanged, even if the number of heating days will fall. The Vaillant Group already today meets this trend with a broad line-up of its product portfolio and its consistent alignment on energy-efficient and environment-friendly systems, which can be used both for heating and cooling. So the Vaillant Group is part of the solution to the worldwide climate problems.







The challenges of tomorrow –
the Vaillant Group world in 2020

Resources

Due to a growing thirst for energy outside Europe, energy prices will rise continually to 2020. According to the calculations of the IEA World Energy Outlook, the price of crude oil will be at least 30 per cent higher and thus cost more than US\$100 a barrel. In 2009 it was US\$60. Not only the growing thirst for energy but also the finiteness of fossil fuels will move people to change their thinking. The Vaillant Group is responding to that with the development of products based on renewable energies, which use energy with the greatest possible efficiency and can also be intelligently combined with each other. They include heat pumps, solar systems, wood pellet boilers and micro-combined heat and power systems.



The challenges of tomorrow –
the Vaillant Group world in 2020

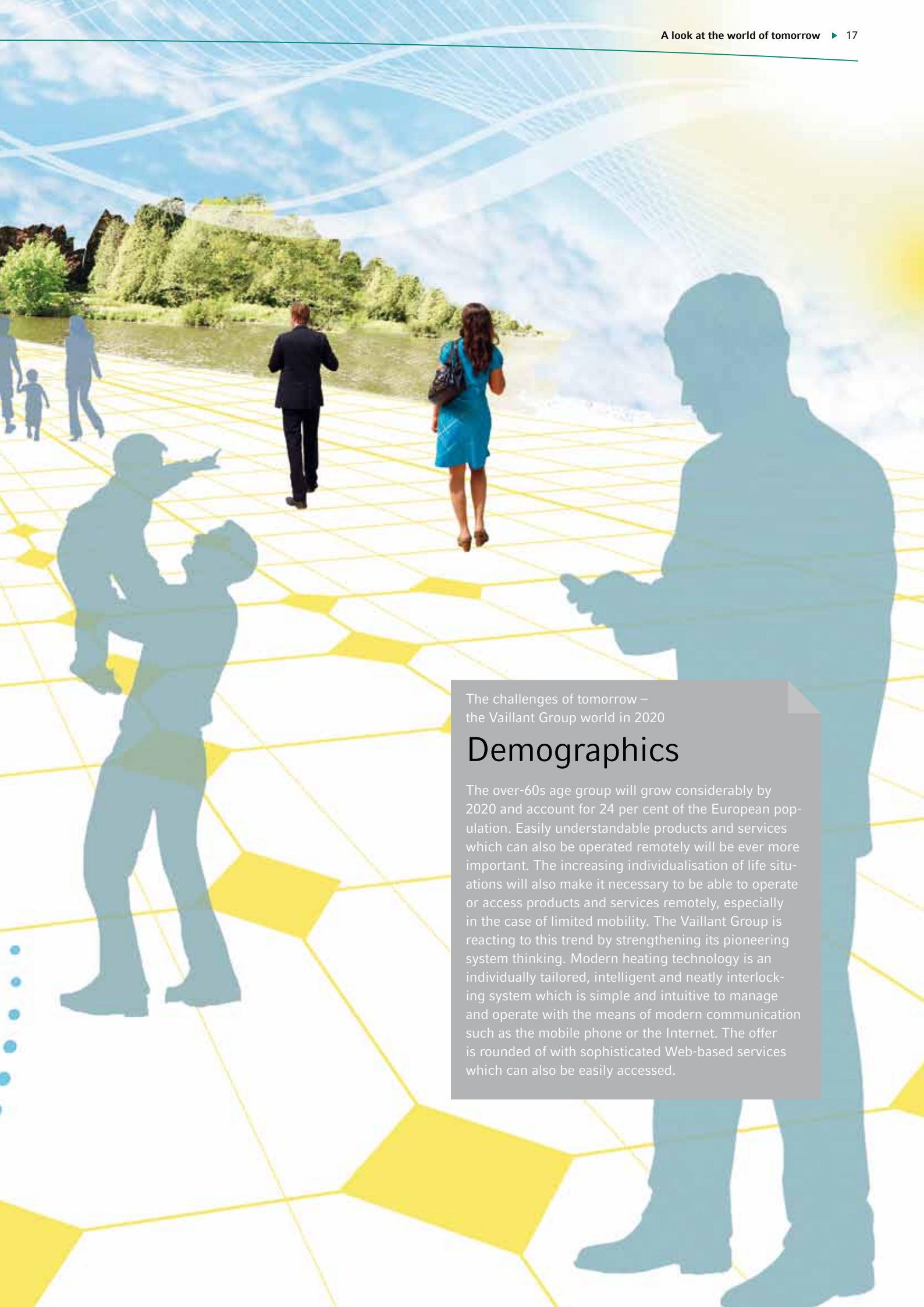
Energy efficiency

Energy efficiency will remain the dominant issue. Gas will continue to play an important role as a source of energy, which in the conversion to full supply with renewable energies can be a decisive bridge. Given a declining need for heat, domestic energy generation will become more important. In Germany alone in 2020, about 185,000 installations with combined heat and power (of up to 3 kW electrical output) will produce environment-friendly heat and electricity in single- and two-family houses. The refurbishment of existing housing stock in accordance with statutory energy efficiency standards will also be a dominant issue. The integration of solar energy, environmental heat and the central management of components will thus become standard in future. The low-energy standard will also assert itself in the existing housing stock; six million houses in Europe will then need controlled living space ventilation. For the Vaillant Group this means a significantly increased market potential in all areas of efficient heating, ventilation and air-conditioning technology.

**Vaillant****ecoPOWER**







The challenges of tomorrow –
the Vaillant Group world in 2020

Demographics

The over-60s age group will grow considerably by 2020 and account for 24 per cent of the European population. Easily understandable products and services which can also be operated remotely will be ever more important. The increasing individualisation of life situations will also make it necessary to be able to operate or access products and services remotely, especially in the case of limited mobility. The Vaillant Group is reacting to this trend by strengthening its pioneering system thinking. Modern heating technology is an individually tailored, intelligent and neatly interlocking system which is simple and intuitive to manage and operate with the means of modern communication such as the mobile phone or the Internet. The offer is rounded off with sophisticated Web-based services which can also be easily accessed.

ENERGY-EFFICIENT PRODUCTS AND SYSTEMS

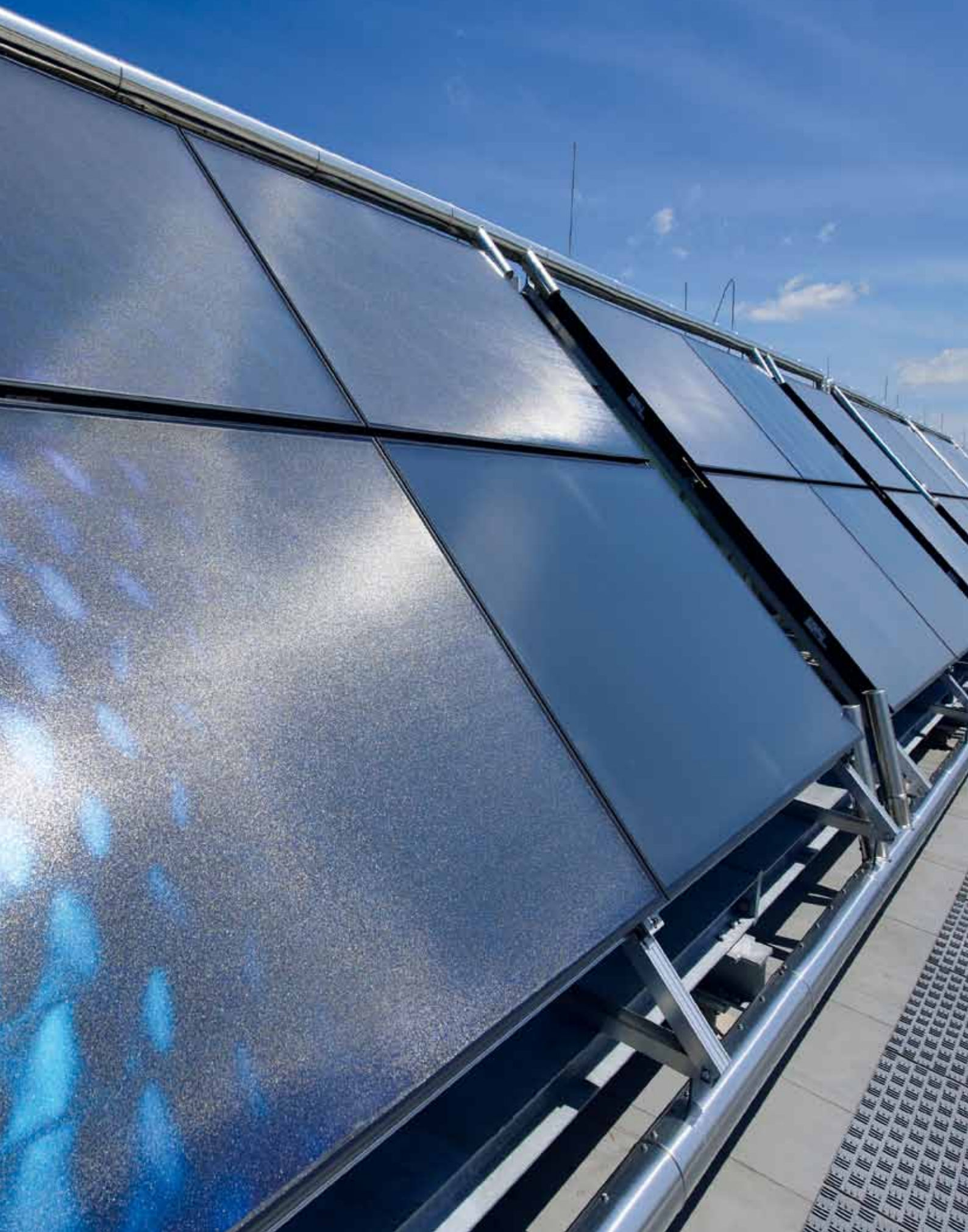
The heating technology market has changed rapidly in recent years. New technologies, geared to systems with several components, the integration of renewable energies, and also the political will to reduce pollutant emissions, are factors that strongly influence the modern heating technology industry. The trend is away from single heating appliances that only supply a home with heating and hot water. The future belongs to hybrid systems that combine various energy sources. System suppliers such as the Vaillant Group combine the know-how of years with a wide offer of energy-efficient heating systems – ranging from highly efficient condensing appliances for fast and easy replacement to products based on renewable energies such as solar thermal installations, heat pumps, wood pellet boilers, combined heat and power systems, controls and ventilation units for low-temperature houses.

It's important that the entire system is tailored exactly to a building's heat requirement. In addition, all system components must be optimally harmonised with each other. The Vaillant Group offers all the components such as heat generators, storage cylinders and smart controls, along with the corresponding service, all from one source. This ensures that everything fits together and functions in the best possible way.

On the following pages we show you the great number of options of our heating systems in the various areas of application. Thereby the Vaillant Group presents one of the widest ranges of the entire heating, ventilation and air-conditioning industry.



Products based on renewable energies, such as eco-friendly heat pumps, are becoming increasingly more important in heating technology.



The products of the Vaillant Group

The international heating, ventilation and air-conditioning technology market is changing fundamentally. The focus is above all on energy-efficient systems and products based on renewable energies. Controls connect the individual components of a heating system, such as heating appliances, storage tanks and solar collectors, thus creating smart system solutions. This trend is reflected in the product portfolio of the Vaillant Group. For every application area and for all types of energy, the Group offers perfectly tailored solutions which combine highest energy efficiency with comfort.

01 ► Solar collectors

Solar collectors serve to provide hot water and support heating. They absorb sunlight and especially heat radiation so that the water they contain heats up. The collectors are available as tube or flat-plate versions.



01

02 | 03 ► Condensing boilers

In contrast to customary heating appliances, condensing boilers use the heat energy in the flue gas which otherwise is lost up the chimney. They liquefy the steam in the flue gas and draw the residual heat energy from it by condensation in the heat exchanger. This is then fed into the heating cycle. Condensing boilers are available as wall-hung or floor-standing variants.



02

04 ► Heat pumps

Heat pumps extract natural energy from the soil, ground water or the air. They work emission-free and stand out for their very low energy consumption. Due to its separation in an internal and an external unit, the air based heat pump technology was optimised yet again.



04

05 ► Zeolite gas heat pump

A zeolite gas heat pump combines the benefits of modern heat pumps with those of gas-fired condensing heating and solar technology. To further increase its efficiency, and for the first time in the history of heating technology, the appliance is equipped with a zeolite unit. Zeolite has a structure like a sponge, with many cavities in which the mineral absorbs water. In doing so, the zeolite develops heat which is also used in the heating process.



03



05



06



07

**06 ► Combined heat and power**

Combined heat and power (CHP) is a cost-saving form of power and heat generation. A micro-CHP unit contains a gas-powered combustion engine that drives a power generator. The heat arising from the power production by the engine and generator, as well as the heat of the flue gases, is used for heating and hot water.

07 ► Pellet boiler

A pellet boiler can cover a building's entire need for hot water and domestic heating in an environment-friendly way. For fuel it uses wood pellets that occur as waste material in wood processing.

08 ► Storage tanks

Hot water storage tanks have become a significant factor of modern heating systems, with many control functions. They take in heated water through solar collectors and other heat sources, such as condensing boilers or heat pumps, and store the heat until it is needed for hot water or heating.

09 ► Controls

Controls are the interface between the heating system and the user. Depending on the need, the indoor climate can be set individually.



09



Naturally economical

Whether it's an apartment or a house, a new building or a modernisation project, whether it's solar energy, geothermal energy or biomass, gas, oil or electricity – the Vaillant Group offers tailored solutions combining comfort and supreme energy efficiency for all applications and all types of energy. In addition to energy-efficient heating products such as heat pumps and condensing boilers, the Vaillant Group makes a major contribution to reducing energy consumption and heating costs with

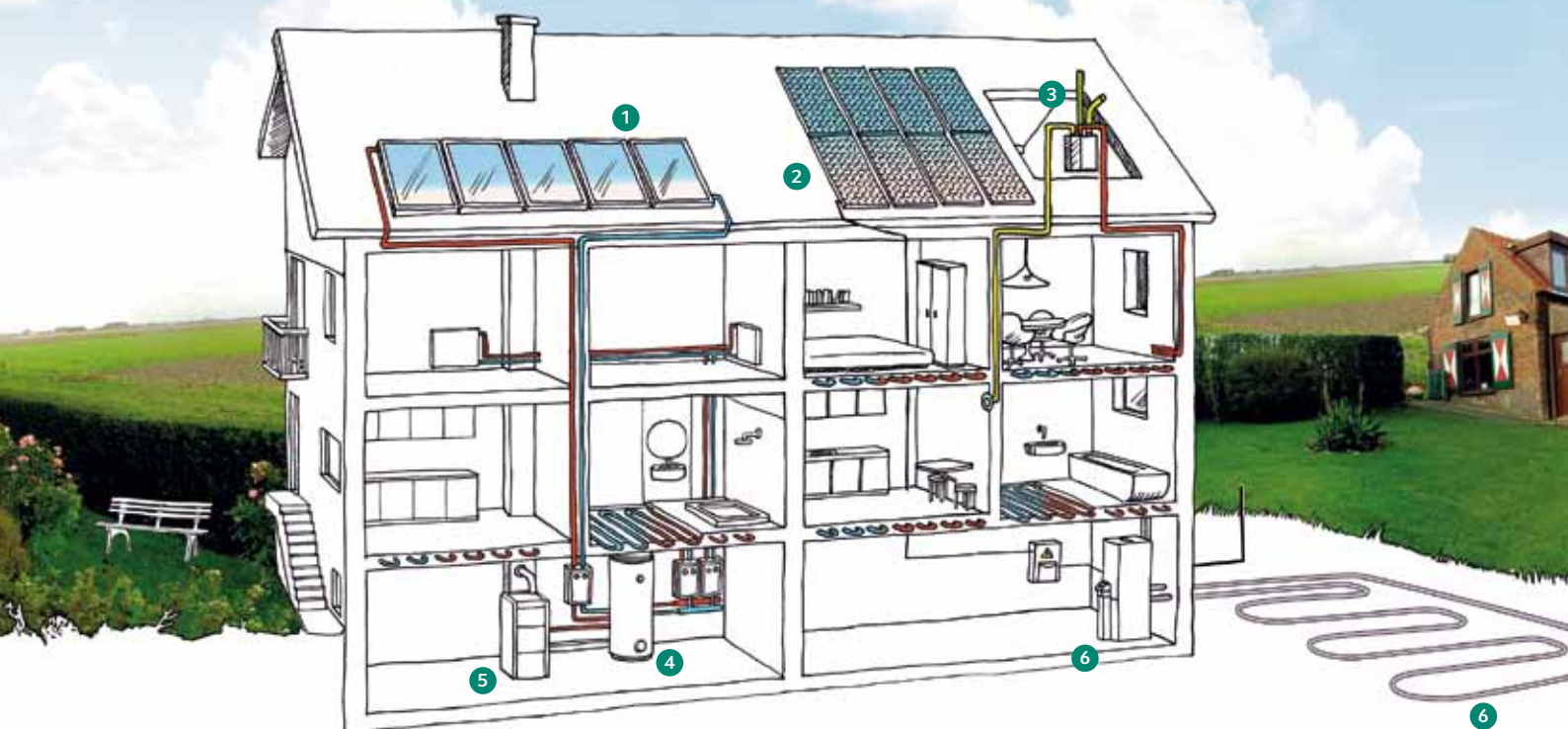
Efficient and economical: The Vaillant Group offers tailored systems for detached and semi-detached homes.

01 ► Solar collectors collect the heat of the sun and make it available for producing hot water and central heating support. Around 60 per cent of the energy needed for hot water and 20 per cent of heating energy can be met by solar power at zero cost.

02 ► Photovoltaic systems harness the power of the sun. They produce eco-friendly, emission-free electricity from light – either direct sunlight or diffuse lighting under cloudy skies. In many countries, solar electricity can be fed into the public grid frequently at attractive prices.

03 ► The future of building belongs to low-energy houses. They are designed to lock in heat almost hermetically. **Heat-recovery ventilation systems** ensure a pleasant climate in the house. They transfer heat from exhaust air to incoming air, letting fresh air into the house without letting the heat out.

04 ► Solar storage tanks turn a central heating unit into a hybrid system. They absorb solar energy and use it to heat water or feed it into the heating circuit. The boiler only needs to help out occasionally for instance, in winter when the sun has not been shining.



05 ► Gas- and oil-fired condensing appliances today are more economical than ever. Condensing boilers are particularly energy-efficient because they also use the heat contained in the flue gases, which with conventional boilers is lost through the chimney. In addition, they can be combined easily with renewable energy products to form highly efficient hybrid systems.

06 ► A heat pump is the cheapest, most efficient method of heating. The heat pump takes three quarters of its heating energy from the environment, at zero cost and with no effect on the climate. Only a quarter of the energy has to be added in the form of electricity.

The **ground collector** removes heat from the soil, which is then raised to the temperature required for heating in the heat pump. Alternatively, a ground loop or ambient air can also be used as the heat source.

A heat pump is particularly eco-friendly when combined with a photovoltaic system. Over the year, the photovoltaic system can produce exactly the amount of solar electricity needed to operate the heat pump. The energy of the sun can thus be used to heat the home – at zero cost and with no impact on the climate.

hybrid systems which make additional use of renewable energies. For example, boiler units can be combined with solar thermal systems. The use of solar energy to heat water and support building heating can save large amounts of energy and reduce harmful emissions. The focus is on intelligent control systems which combine individual components such as boilers, storage units and collectors into intelligent integrated systems.

Ready for the challenge:
Whether it's for a single apartment or a large building – the products of the Vaillant Group are ideal for the job.

07 ► Wall-hung condensing boilers are the number one choice, especially when it comes to modernising larger residential buildings. They can be installed quickly almost anywhere and offer individual comfort with impressive energy efficiency in each residential unit. And because several boilers can be connected to a single chimney, installation requirements are minimal.

08 ► Solar collectors collect the heat of the sun and make it available for producing hot water and central heating support. Around 60 per cent of the energy needed for hot water and 20 per cent of heating energy can be met by solar power at zero cost.

09 ► A hot water station makes it possible to heat drinking water hygienically and efficiently in large buildings. It works like an instantaneous water heater, heating only as much water as is currently needed, using the heat of the sun stored in a buffer storage tank, for example.



10 ► The micro-CHP system ecoPOWER is a gas-fired combustion engine which drives an electricity generator. The heat produced by the engine and generator during electricity production is used for heating and hot water. And because electricity is produced exactly where it is needed, by the building's own power plant in the basement, there are no grid losses.

11 ► Large-scale boilers can handle sizeable challenges but without the heating bills to match. Operating with multiple modulating burners, they adapt precisely to current heat requirements. In this way, they contribute to highly efficient heating of large buildings, working on the principle "as much as necessary, as little as possible."

12 ► Buffer storage tanks store water which has been heated by solar collectors and other heat sources such as wood pellet boilers, heat pumps or condensing appliances. They store the heat until it is needed for hot water or heating. Buffer storage tanks are therefore the central element of renewable energy systems.

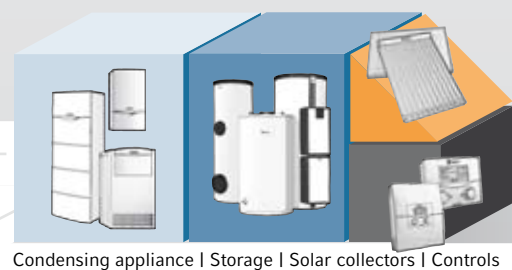
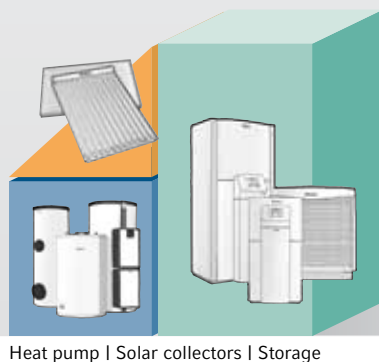
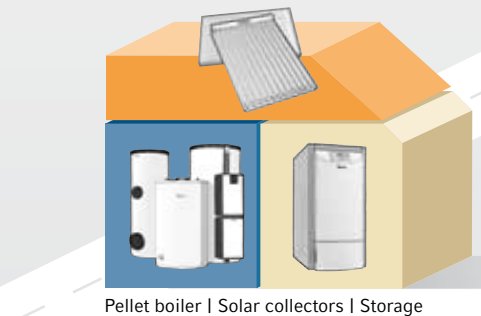
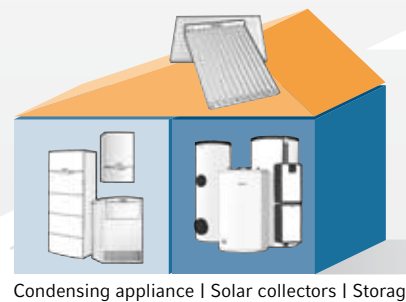
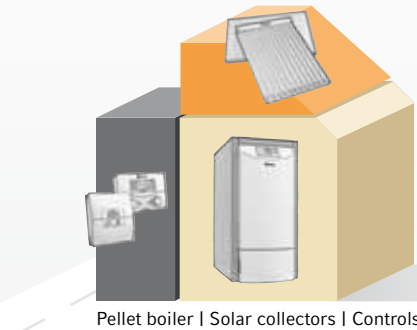
Energy-efficient systems from one source



Technologies based on renewable energies, gas and oil heating appliances, storage tanks, intelligent controls and comprehensive service – the Vaillant Group offers its customers products, systems and services from one source.

Increasingly, so-called hybrid systems in heating, ventilation and air-conditioning technology are being called for. This means that various energy sources are intelligently combined with each other. For instance, gas-fired condensing heating appliances, heat pumps or wood pellet boilers can be combined with a solar installation. So solar energy can cover about 60 per cent of the energy needed for hot water and about 20 per cent of the heating energy at no cost. In addition, the storage tank and control technology is integrated in the overall system. The trend is away from single heating appliances to more complex systems that use several energy sources and integrate intelligent storage and control technology.

On this double page spread we present to you a selection from a great number of options for combining the various heating technologies.





Heat pump



Solar and hot water storage tank



Pellet boiler



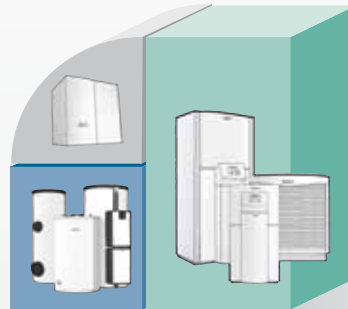
Micro-combined heat and power system



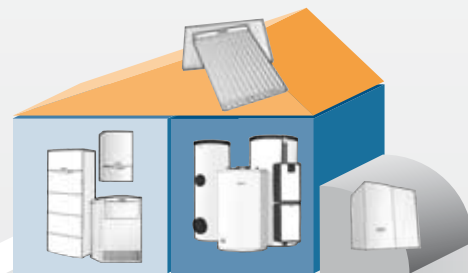
Controls



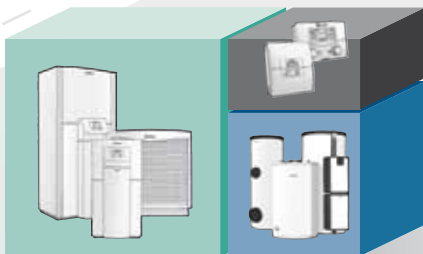
Ventilation

Micro-combined heat and power system
Condensing appliance | Storage

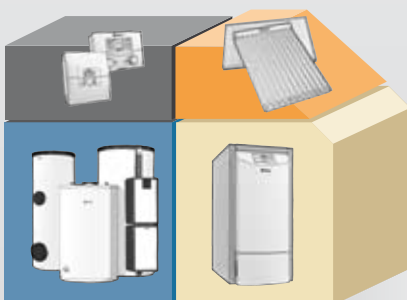
Heat pump | Storage | Ventilation



Condensing appliance | Solar collectors | Storage | Ventilation



Heat pump | Storage | Controls

Micro-combined heat and power system
Condensing appliance | Storage

Pellet boiler | Solar collectors | Storage | Controls

THE VAILLANT GROUP IN CONCRETE TERMS

The Vaillant Group can look back on a long and successful tradition in the international heating, ventilation and air-conditioning industry. The company combines eight heating technology brands under its roof, which produce and sell their products around the world.

Innovation and technology leadership, as well as a clear avowal of sustainable development has characterised the company from the beginning. Major inventions of the industry stem from Vaillant. Today, the company has the industry's largest research and development team, which with its inventions still substantially helps to shape the whole industry. Last year, the Vaillant Group presented the world's first zeolite gas heat pump and developed Europe's first micro-combined heat and power system for use in single-family houses.

Our employees form the basis of our success. That's why the Vaillant Group focuses on long-term bonds, good training and attractive personal development opportunities for its staff.

Get to know the Vaillant Group brands and employees on the following pages. Learn where you can find our products and what quality and sustainability mean to us. And take a look at the company's long tradition of innovation from the days of its founding.



The headquarters of the Vaillant Group in Remscheid.



The basis of the success of the Vaillant Group is its employees. Their competence and wealth of ideas are the company's most important success factors.



Something for everyone

The Vaillant Group presents itself around the world with eight heating technology brands. In 2010 the company combined its brands from formerly three brand groups to the present two: the Vaillant and Saunier Duval Brand Group. Since then the Protherm and DemirDöküm brands have become part of the Saunier Duval Brand Group.

By this means the Vaillant Group addresses the customers of the most important market segments with suitable products and services. We offer the respective customer groups a harmonised product and service portfolio whose basis is one of the

widest ranges in the international heating, ventilation and air-conditioning technology business. In particular, we are continually expanding our offer in the renewable energies sector.

Vaillant Brand Group

Johann Vaillant founded his master craftsman's installation company in Remscheid in 1874. In the more than 136 years since then the company has become a leading European supplier of intelligent systems for domestic comfort.



Saunier Duval Brand Group

Saunier Duval, based in Nantes, France, has been a pioneer of the industry since 1907. The brand covers the entire range of heating, ventilation and air-conditioning technology as well as many innovations.



The Dutch company, founded by Herman van Thiels almost 80 years ago, has grown to become an important Dutch supplier that offers a wide range of products with excellent value for money.



Under the Belgian brand Bulex, high-quality appliances for heating, hot water and air-conditioning in business complexes and residential buildings have been offered for 80 years. Today they fulfil the highest demands for comfort and good ecology.



Demir Döküm, founded in 1954, is the leading heating and air-conditioning technology specialist in Turkey. In addition, DemirDöküm products are sold in more than 50 countries in Europe, Asia and North Africa.



Since 1934, the focus of the leading heating appliance manufacturer in the UK has been on reliable, highly efficient products that work in both an energy-saving and environment-friendly way.



The Italian Hermann company began its activities in the heating technology business in 1970. Since then it has developed into a highly modern brand that is focused on compact wall-hung boilers.



Protherm, the youngest brand, came into being in 1991 and today has a leading position in several Eastern European countries. Protherm also exports to many other countries in Europe, Asia and Africa.



Saunier Duval makes its debut in Austria

At the end of January 2010 the French brand of the Vaillant Group made its debut in Austria. Since then the Group has been present there with two brands – Vaillant and Saunier Duval. With easy-to-install proven products, Saunier Duval now offers the customers in Austria clever solutions with an attractive value-for-money ratio. But the Austrian team of Saunier Duval is in no way competing with their colleagues from Vaillant for market shares. Rather, the Vaillant Group aims to cover the additional market segments in Austria.

The Vaillant Group brand Saunier Duval has also been represented in Austria since the beginning of 2010.





In 2010, the brands of the Saunier Duval Group presented themselves in a uniform design.

Joint appearance

The Saunier Duval Brand Group of the Vaillant Group got a new look at the beginning of 2010. Saunier Duval, awb, Bulex, Glow-worm, Hermann and Protherm now present themselves in a uniform design. The new image is aimed at creating aware-

ness of the common strengths and values of the six brands. With proven products and uncomplicated solutions at an attractive price, the Vaillant Group brands in the performance segment address above all price-conscious customers and installers looking for high reliability and pragmatic solutions.

Recommended!

In its September 2010 issue, the British consumer magazine Which? commended the Vaillant brand as the most reliable heating technology brand in the UK. With 84 per cent for customer satisfaction and 76 per cent for reliability, Vaillant achieved the highest scores in this sector. These results reflect the good reputation of the Vaillant brand among British customers. Between May and June 2010, Which? asked 3,750 members of its customer panel about their experiences with their heating appliances installed six years earlier. Both the Vaillant ecoTEC in two output sizes and the Ultracom 24hxi heating appliance of Glow-worm were honoured by Which? with the rating "Recommended".



The Vaillant brand was commended in the UK as the country's most reliable heating technology brand.



Close to its customers worldwide

The Vaillant Group sells its products in more than 80 countries, to a large portion via our own sales companies, and maintains production plants in seven European countries and China.



Germany
UK
Italy
Austria
Spain
Belgium
Netherlands
Turkey
Croatia
Poland
Russia
France
Ukraine
Denmark
Switzerland
China
Czech Republic
Romania
Hungary
Slovakia

and in more than
60 other countries



Spain
France
Italy
Hungary
Poland
Romania
Ukraine
Algeria
Russia
Denmark
Tunisia
Lithuania

and in more than
40 other countries



Netherlands



Belgium



- Countries where Vaillant Group products are sold



Turkey
Germany
Russia
Ukraine
Romania
Spain
Greece
Algeria
Egypt

and in more than
40 other countries

DemirDöküm

UK
Ireland

Glow•worm

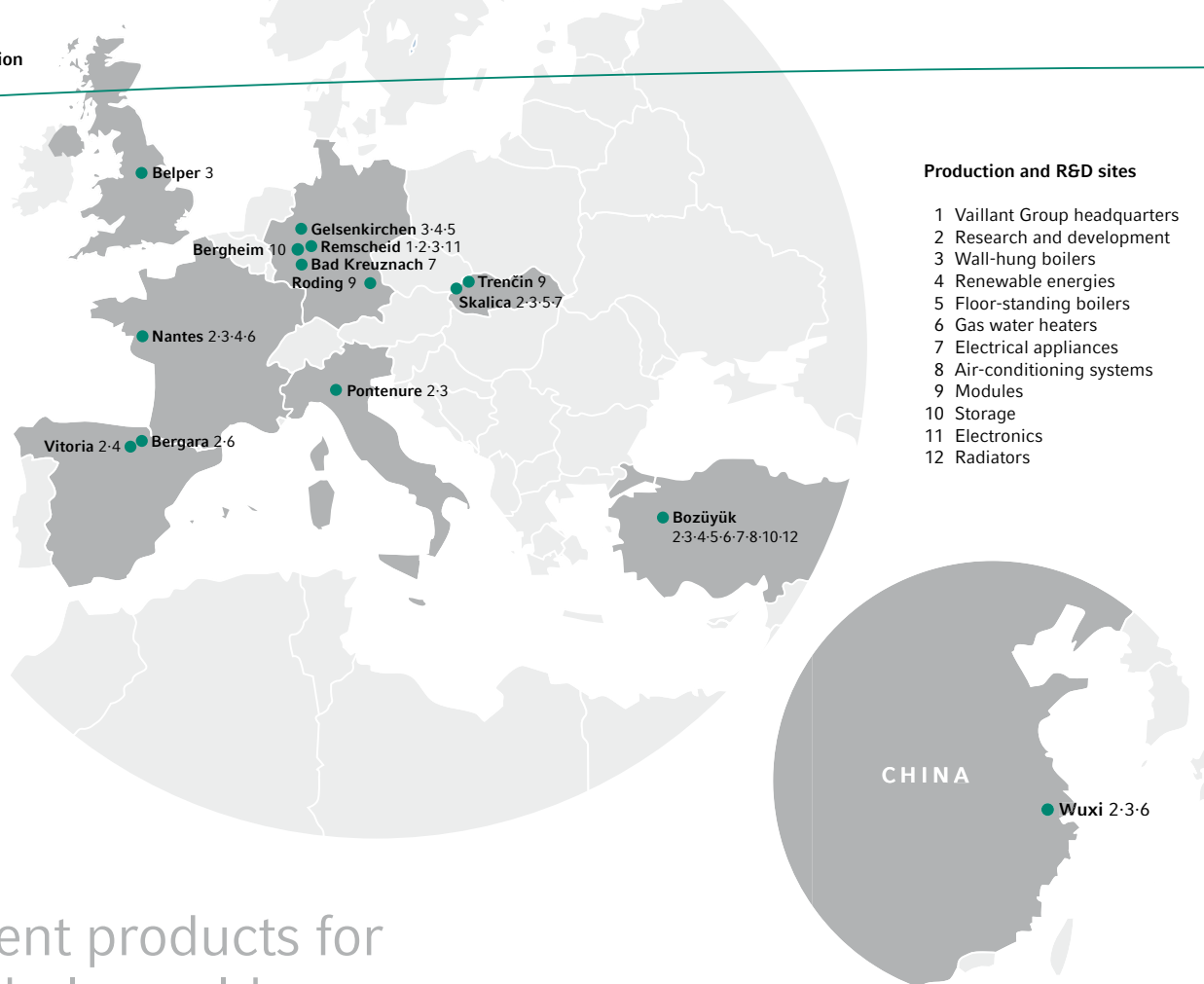
Italy
Ukraine
Spain
Russia
Romania
Czech Republic

Hermann

Russia
Turkey
Slovakia
Czech Republic
Ukraine
Romania
Lithuania
Kazakhstan
Belarus
Moldova

and in more than
20 other countries

protherm



Efficient products for the whole world

The Vaillant Group maintains 14 production sites in seven European countries and China. The Group manufacturing network is closely linked. The main focal points are the final assembly and inspection of new appliances and the production of selected core components and modules.



The new hydraulics laboratory optimises the production processes in Skalica.

New hydraulics laboratory in Skalica, Slovakia

The Vaillant Group plant in Skalica has expanded its test laboratory by 20 test stations for hydraulics inspections. The plant carries out service life tests of modules and hydraulic components according to Group standards. These include tests of tightness under excess pressure (burst load test) and in the case of abrupt pressure changes (water impact test), as well as tests of temperature endurance. In addition, the test laboratory in Skalica has the first Vaillant Group test stations for testing switching and three-way valves. With the new hydraulics laboratory, the Vaillant Group is further expanding its competence in tests and inspections and thus contributing to better quality and safety of its products.

Opening of the third Vaillant Group solar collectors production

Since January 2010 the Turkish production site of the Vaillant Group in Bozüyük has manufactured flat-plate solar collectors. This means the Vaillant Group now produces solar collectors at

three sites: Gelsenkirchen (Germany), Nantes (France) and Bozüyük (Turkey). The collectors developed and produced by Demir Döküm are sold under the product name "Sunrol". Together with solar storage cylinders and hydraulic fitting sets, the collectors are certified as a system.

The Turkish Vaillant Group plant has produced its own solar collectors since the beginning of 2010.



Vaillant Group plant in Belper, England, wins Best Factory Awards

The Vaillant Group plant in Belper won the Best Factory Awards (BFA) in the UK in the two categories "Best Plant" and "Energy and Sustainability". The BFA offer companies the opportunity to measure themselves at a high level against other manufacturers of various industries. In addition, the BFA also provides an occasion to compare notes with the best companies in the UK that aim for the highest standard in their industry.

"The Vaillant Group plant in Belper is especially customer-oriented and was designed for fast material flow. That achieves high savings in time and money," the BFA jury said. "The company applies the Six Sigma methods, which include the employees in further development. That has contributed to significantly increasing the site's productivity and

ability to supply. The versatile skills of the employees are standard here. Flexible contracts enable work volumes to be adjusted to the current order situation." This meant that in the two categories the Vaillant Group in the UK asserted itself against more than 500 contestants.

The Best Factory Awards have been presented for the last 20 years by Cranfield University and the magazine Works Management. More than 1,600 companies have been evaluated since then.

The colleagues at the Vaillant Group plant in Belper won the Best Factory Awards in the UK in 2010.



Searching for maximum benefits

Research and development has a long tradition at the Vaillant Group. Right from its beginnings, the company has helped form major heating technology innovations and launched them on the market. Last year, 587 colleagues worked on improving existing technologies and refining new ideas.

They provide the technological foundations for systems that convert renewable energy and fossil fuel sources, for using geothermal and solar heat, energy storage and recovery, and for linked systems that generate electricity and heat. In 2010, no fewer than 15 new product families were launched on the market and 27 new development projects started. An important focal point for development is the combined heat and power segment. Here, we pressed further ahead with our research and development activities in the condensing technology and Stirling and combustion engines areas in 2010.

► R&D FOCAL POINTS IN 2010

- Systems based on renewable energies and fossil fuels
- Easy-to-use communication and control technology
- Condensing technologies
- Systems that use geothermal and solar heat
- Systems for energy storage and recovery
- Linked systems that generate electricity and heat



The new Vaillant split heat pump generates efficient, environment-friendly and quiet heat for heating and hot water.



In 2010 the Saunier Duval Brand Group also launched a new heat pump generation.

“Smart” heat pump

In 2010 the Vaillant Group launched the new Genia Hybrid heating system under the Saunier Duval Brand Group. It is the first device to intelligently combine an air-water heat pump with a gas-fired heating appliance. A hydraulic module links the two heat generators with the heating circuit in a house. When the outside temperature is mild, the heat pump works alone. On days when slightly more heat is needed, an electronic control switches on both heat generators in the Genia Hybrid Universal system at the same time, or only the heating appliance in the Genia Hybrid Compact system. If the outside temperatures drop below a certain level, the electronic control switches on only the gas-fired condensing appliance, because the system then works at its top efficiency.

The system can be combined with all types of radiators, from floor heating with low flow temperatures in well-insulated new buildings to radiators with high flow temperatures in old building stock.

Heat taken efficiently from the air

In 2010, the Vaillant Group launched its first air-water heat pump with split technology under the product name Vaillant geoTHERM. The system consists of an outside unit and a brine-water heat pump that efficiently uses the warmth from the ambient air to heat buildings and provide hot water. The outside unit sucks in ambient air and leads it over a heat exchanger. Here the heat of the ambient air is transferred to a brine circuit which transports it through piping to the inside unit. This is where the temperature of ambient heat transferred by the brine from the outside unit is raised to a level that can be used for heating.

The air-water heat pump system with split technology is especially efficient, because during its transport through the piping laid in the soil the brine reaches the maximum temperature of the ambient air. That prevents heat losses. At the same time, the Vaillant geoTHERM heat pump with split technology is the quietest appliance on the market.

► MILESTONES IN 2010

- Market launch of the world’s first zeolite gas heat pump
- Project to develop a heat pump hybrid system for single-family houses and flats
- Last field test phase in our research cooperation with the Japanese engine manufacturer Honda to develop a micro-combined heat and power system for single-family houses.
- Continuation of our research cooperation with the Fraunhofer Institute for Ceramic Technologies and Systems (IKTS), Dresden, to develop a fuel-cell heating appliance
- Development of a wall-hung Stirling heating appliance for several European markets

Our stable foundation

The basis of our success is our employees. A total of 12,423 colleagues ensured that also in 2010 the Vaillant Group was one of the most successful companies in the heating technology industry in Europe. Continual further development and a long-term bond with our employees are the main elements of our human resources work.

The latest cycle of the Vaillant Group future managers programme, the Junior Management Circle, started in April 2010. The programme prepares young talent from the ranks of the Group for future managerial tasks. The main contents of the seminars are corporate values, employee leadership and project training. The programme lasts for about 18 months and is conducted in both German and English.

In September, the Vaillant Group introduced a quarterly trend survey among the employees. Besides our two-yearly major survey for all employees, the trend survey based on random sampling gives a regular picture of the sentiments of the workforce. The major employee survey was last carried out at the end of 2010.

Dr Axel Busch (standing)
is Head of Group Strategy.



On the way up

In the Junior Management Circle the Vaillant Group trains young future managers from its own ranks. What does the JMC do for the participants? A graduate of the first generation reports.

You don't learn the most important thing. "Nowhere, not at school, not at university and only incidentally in one's work," says Dr Axel Busch. The most important thing? "To communicate professionally," explains the doctor of engineering, who is our Head of Group Strategy since 2011. He learnt it after all: in the JMC. In role plays they got to the bottom of things: strengths and weaknesses, the reasons for one's own and other people's actions. The participants practiced talks with employees and acquired new management skills.

"What opportunities at all do I have as a manager?" Busch names as one of the central questions which the JMC answered. While he was still at the JMC he was given responsibility for personnel as Head of International Sales of Air-conditioning Systems. "What we in the JMC had discussed and learnt I was able to apply right away."

Empathy in talks with employees and above all self-assessment – these are skills that often prove to be a hard nut to crack. The graduates from the JMC are still important advisors in such situations. "We drew very close together," says Busch. "Friendships also arose." It's a network that he likes to fall back on and that is spread very wide. After all, the participants came from various countries and departments.

The Vaillant Group managers are regularly given further training in specific managerial issues in separate courses.



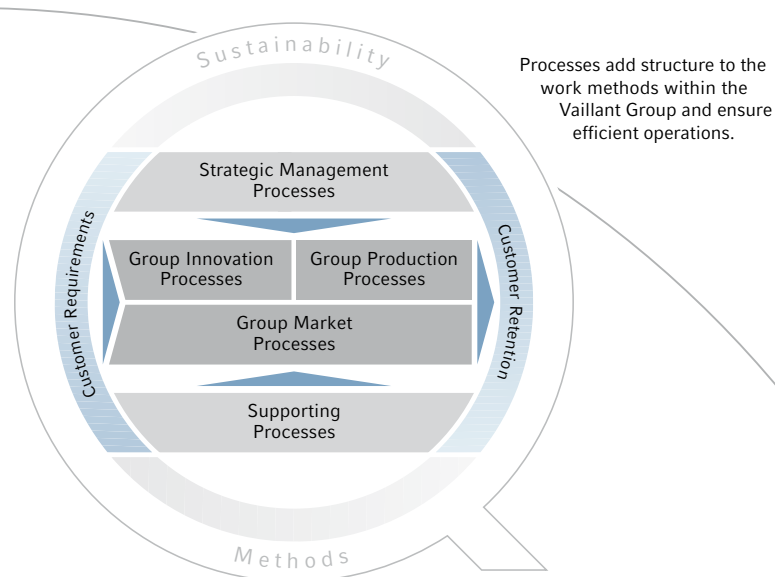
How we are seen by others

In September 2010 about 150 colleagues of our second managerial level in Germany took part in the second section of our training programme on "Partnership". The focal point was the forming of relationships in working life as well as role changes in the daily routine. If managers show an interest in their employees individually and behave appropri-

ately in the respective situation, they can motivate them to the best possible performance. So role flexibility and status change were the focus of the practical exercises, which with the support of professional actors took place as part of a theatre setting. This made it possible to analyse the impacts of various behaviour and communication patterns in an experimental environment.



Dr Axel Busch completed the Vaillant Group future managers programme.



Quality Management

Our customers expect products and services that meet the highest demands on safety and functions. So quality is one of the most important requirements that we face. For us, this demand means more than just reliability.

We see quality as the entirety of all the properties of our products and services, suited to meet the needs and wishes of our customers. Since 2008 the Vaillant Group has had a quality management system that is based on the approach "From customers to customers". This means that our customers define what good quality means for them. And they also decide whether we have lived up to these demands. To fulfil them, we at the Vaillant Group live out a quality culture in which all the employees assume responsibility for the quality of their work, processes and thus for the overall quality of our products and services.

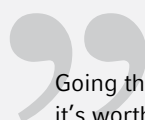
The quality management system includes all the departments from product development and manufacture to customer service. Via our section "Best Processes", created in the end of 2010, the necessary objectives and derived processes are described in cooperation with the responsible specialist departments. In a comprehensive appraisal, the departmental interfaces are analysed and a majority of the decisive processes effectively and efficiently tailored to the customers. In addition, in special training measures employees across the Group are trained in quality methods. This is how the participants learn to analyse, effectively plan and continually improve their work processes.

The process made step-by-step

Without a certain degree of work process organisation, a big company such as the Vaillant Group would be incapable of action. The processes steer the interaction of many colleagues across departmental and national borders.

For this purpose the Group founded the so-called Process Office in April 2010. Its task is to analyse the processes in the entire company, which have often grown over the years, and put them to the test. The objective is to support the responsible

managers in the various company departments in the identification, implementation, steering and improvement of the business processes. Colleagues report:



Going through all the work here in the plant calls for a lot of discipline. But it's worth it. For all processes must fit together so that we can achieve good results.

Peter Kuba, Plant Manager at the Vaillant Group plant in Skalica, Slovakia



A big company such as the Vaillant Group, with many departments and sites in various countries, is like a puzzle. The company processes are to contribute to ensuring that all parts interlock perfectly, flows are improved, and finally that waste is prevented.

Janine Menting, Manager Business Processes



We constantly examine whether the processes are still up with the times, sufficiently flexible, effective and efficient.

Philipp Zeitter, Manager Business Processes



We must constantly adjust the processes to the changes in the company and its environment. Only then do they also benefit us. We aim to achieve the company's objectives in increasing quality and continual improvement.

Stefan Schlesinger, Head of the Process Office



The consistent process orientation at Group Quality has increased the performance because due to clear structures and flows, interface losses have been reduced to a minimum. It also provides a clear view of the possibilities of giving up tasks and organising them better.

Thomas Kupka, Director Vaillant Group Quality

An eye on the big picture

Sustainable, forward-looking business management has been an essential factor of success of the family-owned company ever since the Vaillant Group was founded. Especially in difficult economic times, a long-term and balanced corporate strategy that is not aligned primarily on short-term profit optimisation has proved itself. The basis of this strategy is a company development which combines economic success with protecting the environment and resources, and social responsibility.

To guide a sustainable development in the areas of ecological, economic and social sustainability, the Vaillant Group has developed a Group-wide sustainability management system that is continually expanded. The focus is on:

- Conservation of the environment and resources
- New and further development of energy-efficient products
- Advancement of the employees
- Assumption of social responsibility

The key areas in 2010 were increasing energy efficiency and the subject of industrial safety. In total, the European sites of the Vaillant Group

improved the energy efficiency per unit produced by about 7 per cent last year.

In November 2010, the Vaillant Group was nominated for the German Sustainability Award in the category "Germany's most sustainable products and services". Thus, the Group is one of Germany's most sustainable companies in this category.

More information on the subject of sustainability at the Vaillant Group is given in the company's detailed Sustainability Report.

In 2010, the Vaillant Group was nominated for the German Sustainability Award for the second time.





Vaillant flat-plate solar collectors ensure the hot water supply in a tube-cleaning installation at the Remscheid plant.

Sunshine clean

At the Vaillant Group plant in Remscheid, Vaillant flat-plate solar collectors are providing heat for a cleaning process in tube production for the first time. On the roof of the tube production section, 30 Vaillant flat-plate solar collectors capture the heat of the sun. These supply the tube washing system with hot water for the washing baths. So a large part of the heat needed is now covered by the sun's warmth in an environment-friendly way and

free of emissions and costs. The solar system is to supply about 14,400 kilowatt hours of heat energy a year. That roughly corresponds to the annual heat requirement of a well-insulated single-family house with an area of 150 square metres. The system consists almost entirely of standard components from the Vaillant product portfolio and is a perfect example of the use of solar thermal energy in industrial processes.

Heating as a filling station

A Vaillant brand ecoPOWER micro-combined heat and power system covers the energy requirement of the electric car manufacturer Smiles AG in Lower Franconia in a particularly sustainable way. On the one hand, the system supplies heat and electricity for the workshops and the office building. And on the other hand, the micro-CHP system supplies the company's own car-charging stations with electrical energy at the same time. By this means, emissions can be reduced by 70 to 80 per cent compared to the most frugal combustion engine vehicles. The e-cars from Smiles consume between 3.5 and 12 kilowatt hours of electricity per 100 kilometres, and the costs of 50 euro cents to €2.50 can be further reduced with the aid of the self-produced CHP electricity.

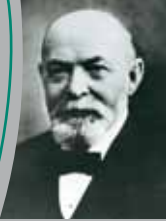


In Aub, in Lower Franconia, a Vaillant ecoPOWER micro-combined heat and power system serves as a charging station for electric cars.



History of the Vaillant Group

1874



Johann Vaillant in Remscheid, Germany, lays the foundation stone for today's Vaillant Group with a master craftsman's installation business. The company is still wholly family-owned.

1894



Vaillant applies for a patent for his "closed system" gas bathroom heater and thereby creates a new market segment. The heater is the first to heat water hygienically without the water being affected by combustion gases.

1924

Vaillant develops the world's first central heating boiler. For the first time, a building's rooms can be heated from a central point. The rooms only need radiators.

1961



With its Circo-Geyser, Vaillant is the first company worldwide to market wall-hung gas circulation water heaters.

1970



Saunier Duval takes over the Belgian heating technology companies Bulex and Renova.

1995



Market launch of the first wall-hung condensing heating appliance developed and produced by Vaillant.

2001

Vaillant takes over British competitor Hepworth-Group. The brands of the new Group continue to be sold separately on the European markets.

2004



The Vaillant Group puts its new module plant in Trenčín, Slovakia, into operation.

2006



Start of heat pump production in Gelsenkirchen.

2007



The Vaillant Group acquires a majority interest in the Turkish heating and air-conditioning specialist Türk Demir Döküm Fabrikaları.

2008



The Vaillant Group opens its first own solar collector production in Gelsenkirchen.

2009



Vaillant seals a cooperation with the Japanese technology company Honda for the development of gas-powered micro-cogeneration units for use in detached houses.

2010

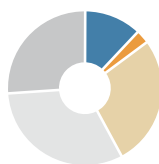


Market launch of the world's first zeolite gas heat pump. It increases the efficiency of customary gas-fired condensing boilers by more than 20 per cent.

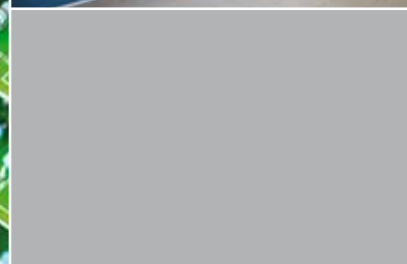
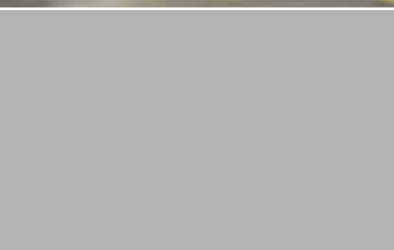
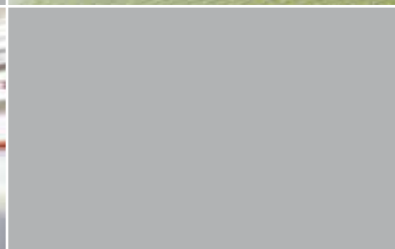
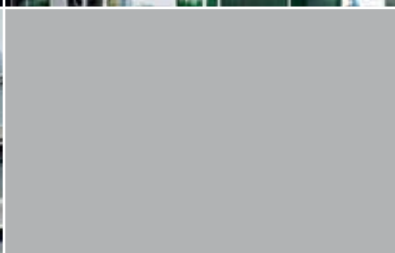
The Vaillant Group in figures

| Vaillant Group | | |
|-------------------------|--------|--------|
| € million | 2009 | 2010 |
| Sales | 2,217 | 2,314 |
| Operating result (EBIT) | 143 | 163 |
| Headcount (employees) | 12,265 | 12,423 |

| Sales by region* | | | Headcount by region | | |
|-------------------------|-----|--|----------------------------|-------|--|
| € million | | | Employees | | |
| ■ Northern Europe | 740 | | ■ Northern Europe | 1,484 | |
| ■ Southern Europe | 655 | | ■ Southern Europe | 3,248 | |
| ■ Central Europe | 602 | | ■ Central Europe | 3,953 | |
| ■ Eastern Europe | 437 | | ■ Eastern Europe | 3,383 | |
| ■ Rest of world | 54 | | ■ Rest of world | 355 | |



* Gross sales before revenue reductions



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